

# Docket No. TRANSMITTAL OF APPEAL BRIEF M3653.0001/P001 Sandra K. Richardson, et al. In re Application of: Group Art Unit Examiner Filing Date Application No. 2155 Forrest Thompson, Jr. 09/334,256 June 16, 1999 METHOD AND APPARATUS FOR PLANNING AND MONITORING MULTIPLE TASKS Invention: BASED ON USER DEFINED CRITERIA AND PREDICTIVE ABILITY TO THE COMMISSIONER OF PATENTS: Transmitted herewith in triplicate is a revised Appeal Brief in this application, in response to the Communication and Notice of Vacatur of Examiner's Answer dated September 19, 2002. was originally paid on January 2, 2002. Thus, no fee is The fee for filing this Appeal Brief believed to be currently due. **Small Entity** Large Entity is enclosed. A check in the amount of Charge the amount of the fee to Deposit Account No. This sheet is submitted in duplicate. Payment by credit card. Form PTO-2038 is attached. X The Commissioner is hereby authorized to charge any additional fees that may be required or credit any overpayment to Deposit Account No. 04-1073 This sheet is submitted in duplicate. Dated: October 21, 2002 Ellen S. Tao Attorney Reg. No.: 43,383 DICKSTEIN SHAPIRO MORIN & OSHINSKY LLP 2101 L Street NW Washington, DC 20037-1526 (202) 785-9700

Docket No.: M3653.0001/P001

(PATENT)

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of: Sandra K. Richardson, et al.

Application No.: 09/334,256

Group Art Unit: 2155

Filed: June 16, 1999

Examiner: Forrest Thompson, Jr.

For: METHOD AND APPARATUS FOR PLANNING AND MONITORING MULTIPLE TASKS BASED ON USER DEFINED CRITERIA AND PREDICTIVE ABILITY

## APPELLANTS' BRIEF SUBSEQUENT TO VACATUR OF EXAMINER'S ANSWER

Attention: Board of Patent Appeals and Interferences Commissioner for Patents Washington, DC 20231

Dear Sir:

Pursuant to the Examiner's Vacatur of the Examiner's Answer on September 19, 2002, based on the U.S. Patent and Trademark Office's delayed entry of two After Final Amendments, Appellants hereby submit in triplicate this Appeal Brief in light of the updated status of the application.

#### I. REAL PARTY IN INTEREST

The real party in interest in this appeal is Métier Ltd., of Washington D.C (Métier).

An assignment by the inventors to Métier was recorded at Reel 010189, Frame 0313.

### II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences.

#### III. STATUS OF CLAIMS

Claims 1-4 and 7-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Duncan. Claims 1-4, 7, 8, 11-15, 19, and 21 were rejected under 35 U.S.C. §112(2) as being indefinite. Claims 5 and 6 were cancelled in the Amendment filed March 2, 2001.

#### IV. UPDATED STATUS OF AMENDMENTS AFTER FINAL

The Supplemental Amendment filed on January 22, 2002 has been entered.

The After Final Amendment filed on April 29, 2002 has also been entered.

#### V. <u>SUMMARY OF INVENTION</u>

The present invention is directed to a system and method for planning and monitoring a project from both a broad prospective and, more importantly, at an individual level for each person involved in the project. The ability to analyze performance at the individual level enables the present invention to more accurately plan the overall timeline of the project and subsequent projects. In contrast, prior art project management tools operate merely at the broad or macro level, and do not take into consideration variable factors which affect the performance of individual employees or workers. As a result, such prior art project management tools typically yield plans which are very inaccurate predictors of the actual time and resources ultimately expended to complete the project.

To achieve the capability mentioned above, the present invention breaks a project down into a plurality of assignable tasks, as does most known project management tools. Each task is then associated with a corresponding estimated start date and an estimated end date. Assignment of the tasks is performed by identifying a current "tasking horizon," and assigning those tasks which may be reasonably started and/or completed within the current tasking horizon. (Specification, p. 6, lns. 7-9).

A tasking horizon, as used in the context of this invention, is a forward window of time, two weeks, for example, for which a person can reasonably plan or predict how his or her time will be spent for the duration thereof. (Specification, p. 11, lns. 16-26, esp. lns. 19-22). Generally, depending on the size, scope and duration of a project, the lifespan of a project will cover a plurality of sequential tasking horizons. (*Id.*).

Throughout the duration of the project, each worker contributing to the project logs each actual start and end date for the various tasks for which he or she is responsible. (Specification, p. 7, lns. 5-6; p. 14, lns. 6-7). Workers may also be enabled to change an estimated start or end date from an initial estimated date. If an actual date occurs in a different tasking horizon (either earlier or later) than the tasking horizon in which the corresponding estimated date was scheduled, or if an estimated date is moved into or out of its original tasking horizon, the difference is defined as "churn." (Specification, pp. 14-16, generally).

During the initial planning stages of the project and prior to the assignment of any tasks to be performed by specific personnel, a set of structured words and/or phrases, referred to as "verbs" in the application, is predefined in the system. (FIG. 4; specification, p. 6, lns. 14-23). When each worker logs an actual date or changes an estimated date in the system, the worker also selects a "verb" from the predefined, structured set, to describe why the actual date occurred either earlier or later than the estimated date, or why the actual date was enabled to occur on the estimated date. (Specification, p. 14, lns. 6-10).

Based on the data acquired from the worker logs, the invention analyzes reasons identified as the causes of churn. Collection of this information enables a more accurate

prediction of and planning for the resources and time frame needed to complete the projects and future similar projects. Churn data also enables management personnel to take active steps to mitigate any causes of churn which is within its control. (Specification, p. 18, lns. 1-3).

The "verbs" logged by each worker may be used to calculate risk factors which represent the percentage probability that an actual task date will deviate from the estimated date, or a standard deviation of time within which the actual task date is likely to vary from the estimated date. (Specification, p. 18, ln. 20 – p. 19, ln. 10; p. 22, ln. 10 – p. 23, ln. 2). A risk factor may be determined with respect to a particular task or with respect to a particular worker. (Specification, p. 18, ln. 21; p. 19, lns. 16-22; p. 21, lns. 9, 12-13).

Using the churn data and the risk factor information, management personnel overseeing the project can thus provide a more reliable project plan and more accurately predict the performances of workers and the resources needed to complete the project.

## VI. STATEMENT OF ISSUES ON APPEAL

1. Whether or not claims 1-4 and 7-23 are properly rejected under 35 U.S.C. § 103 as being unpatentable over the book entitled <u>A Guide to the Project Management Body of Knowledge</u>, by PMI Standards Committee, William R. Duncan, Director of Standards, (pub. Project Management Institute, 1996) (hereinafter "Duncan").

#### VI. GROUPING OF CLAIMS

Claims 1, 2-4, 7, 8, and 11-21 stand or fall together. Claims 9 and 23 stand or fall together. Claims 10 and 22 stand or fall together.

#### VIII. ARGUMENTS

# A. DEFINITIONS OF TERMINOLOGY SPECIFIC TO THE INVENTION

## 1. Generally

Throughout the prosecution of the present application, it has been recognized by consensus that the scope of the present invention as defined by the claims is dependent on certain terms being defined in a manner beyond their usual and customary meanings, as set forth and described in Appellants' specification. In interpreting Appellants' claims, therefore, it is necessary to look to the specification to determine the meanings of these terms within the context of the present invention. The Final Office Action asserts that the definitions of Appellants' terms used by the Examiner were "based on their definition/discussion in the specification" (Final Office Action, p. 12, item 12). There are several notable inconsistencies, however, between the "definitions" set forth in the Final Office Action and the actual meanings within Appellants' written specification.

The reasoning for the final rejection based on the erroneous definitions of the critical terms discussed below are highly prejudicial to Appellants' application. When Appellants' claims are interpreted in light of the proper definitions for the claim terms discussed below, it is clear that the claimed invention is patentably distinguishable over Duncan, the cited reference in the final rejection.

### 2. Tasking Horizon

a. The Definition of "Tasking Horizon" in the Final Office Action is Incorrect.

In the present application, the term "tasking horizon" is described as being "designed to be a realistic planning window that corresponds to the length of time most employees can plan their work" (specification, p. 6, lns. 9-13; p. 11, lns. 17-24). Each tasking horizon is a fixed window of time within which any of a plurality of tasks dates can be scheduled into or removed therefrom (see, e.g., specification, p. 13, lns. 10-13; p. 15, lns. 15-16, 22-24). The present invention then analyzes the movement of task dates into

and out of the relevant tasking horizon to assess the accuracy with which the estimated dates were predicted (specification, p. 14, lns. 18-19). In other words, the progress of the various tasks in a project is measured with respect to this planning window. As such, the period of time encompassed by a tasking horizon is necessarily a window of time which is independent of any specific task in the project.

The Final Office Action acknowledges Appellants' description of the term "tasking horizon" as found on page 11, lines 23-24 of the specification, *i.e.*, "a realistic window of time over which tasks can be scheduled." The Final Office Action, however, then proceeds to redefine the term "tasking horizon" in a manner which is completely unsupported in the present application. Specifically, the Final Office Action redefines the term to be "the duration of time included in the planned time span defined by the task start and stop dates." (Final Office Action, p. 5, item 12). This "definition" of the term is simply not found anywhere in Appellants' specification. Since the Examiner's definition of the term in the Final Office Action has a very specific meaning which is different from the term as used in Appellants' specification, the definition in the Final Office Action is incorrect.

# b. The Definition of Tasking Horizon in the Final Office Action Does Not Make Sense In Light of the Invention Description.

Even worse than being incorrect, the definition of the term "tasking horizon" provided in the Final Office Action is nonsensical when used within the context of the specification and the claims, and essentially renders the term useless. The specification describes a process of assigning the tasks which are expected to be performed (started and/or ended) during a specified taskinghorizon. For example, the description states that "[t]he final step is to assign the tasks 20 that occur during the tasking horizon .... Each day, or at set intervals, the system ... assigns tasks that fall within the next tasking horizon." (Specification, p. 13, lns. 10-14, inter alia). Also, the specification discloses that a "churn capturing process," which is a key component of the present invention, is "triggered when task dates appear, vanish, and/or move into or out of a current tasking horizon" (specification, p. 14, lns. 18-20).

If a tasking horizon is defined by the start and stop dates of a task, as proffered in the Final Office Action, how can a task be assigned to occur within a tasking horizon, if the tasking horizon is, by definition, the period of time encompassed by the performance of the task? Moreover, it is impossible to move a task date into or out of a tasking horizon if the time span of the tasking horizon is defined by the task date itself. Based on the definition contained in the Final Office Action, any movement of a task date would serve to shift the tasking horizon as well.

In the present invention, the tasking horizon serves as a canvas on which various task dates are arranged. The progress of the tasks is measured based on the movement of task dates into or out of the tasking horizon. To define the term "tasking horizon" as the time span encompassed by the start and stop dates of a task, therefore, would destroy the operability of Appellants' invention. Accordingly, the Examiner's definition of the term cannot be correct.

#### 3. Verb

The Final Office Action sets forth the Examiner's definition of the term "verb" as being based on page 12, lines 17-18, and page 14, lines 12-13 of Appellants' specification (Final Office Action, p. 5, item 12). These passages in the specification explain that "verbs" are words which capture the reasons why a task was or was not performed as planned. While this much is true, the definition of the term "verb" as set forth in the Examiner's Answer is incomplete, and therefore, misleading.

The "verbs" used in the present invention are part of a predefined and structured set or sets of words and phrases (or reasons) that have been programmed into the modeling system of the present invention. (Figure 4; specification p. 12, lns. 15-18, p. 12, ln. 22 – p. 13, ln. 6). This aspect of the term is demonstrated in the description of the invention and shown in the accompanying drawings. For example, Appellants' specification describes the inventive system as including the following processes:

"Once the tasks in a project have been determined, the next aspect of the present invention is the planning of the tasks" (p. 11, lns. 16-17). Next, the scheduling of the tasks are described (p. 11, ln. 17 through p. 12, ln. 14). Then, "[t]he next step is to assign verbs [ ] 18 to each task" (p. 12, ln. 15).

This process sequence is visually summarized in FIGURE 4, which shows a flow chart of an "employer task assignment stage" of the invention (specification, p. 8, ln. 10). As can be seen in FIGURE 4, the step of "selecting verbs" 18 occurs after the step of identifying a tasking horizon 16, and before the step of "assigning tasks" 20 to specific workers to perform the tasks. Organization of the pre-selected "verbs" into sets is discussed in Appellants' specification from page 12, line 22 through page 13, line 6, for example.

In light of the above, it is readily apparent that the term "verb" as used in the present invention requires the words and phrases constituting the "verbs" to be part of a predefined, structured set or sets of words and phrases selected during the planning stages of the project. Thus, a complete definition of the term "verb" is a "pre-selected word or phrase among a structured library of pre-selected words and phrases for explaining why a task was or was not performed as planned." Since the "definition" of the term "verb" set forth and relied upon in the final rejection does not require the words or phrases to be part of a predefined, structured set(s) of words or phrases selected during the planning stages of the project, this definition is overly broad and therefore misleading.

# B. THE CLAIMED INVENTION IS PATENTABLE OVER DUNCAN

1. The Passages From Duncan Cited In The Final Rejection Do Not Meet Appellants' Claim Elements

#### a. Generally

The Final Office Action acknowledges that many features of Appellants' claimed invention are not specifically taught in Duncan, it alleges that "it is obvious that the [claimed invention] is disclosed by the invention of Duncan." Not only, however, does the final rejection fail to explain how Duncan discloses or suggests many of the claimed

elements supposedly rendered obvious by Duncan, but it also cites to sections in Duncan out of context and relies upon other sections which are inapplicable when considered in light of the actual definitions of Appellants' terms as discussed above.

To aid the Board in assessing the content of the cited Duncan reference to support Appellants discussion set forth below, Appellants have obtained of a copy of the reference and have attached a complete copy of the same hereto as **Appendix B**.

## b. "Selecting A Tasking Horizon"

Independent claims 1, 9, 10, 17, 22 and 23 all recite a step of or a module for "activating" or "selecting a tasking horizon..." As demonstrated in section II.B. above, the final rejection uses a definition for the term "tasking horizon" which is unworkable for the present invention. Based on the incorrect definition of "tasking horizon," the final rejection indicates that this feature in Appellants' claims is met by section 3.3.2 and p. 170 in Duncan, *i.e.*, the disclosed terms "target finish date and schedule development" (Final Office Action, p. 6). Not surprisingly, these cited passages only teach the determination of predicted start and stop dates of project activities, which corresponds to the incorrect definition of the term "tasking horizon." However, when the passages in Duncan cited in the final rejection are considered in light of the actual meaning of the term "tasking horizon," it is readily apparent that the cited passages do not anticipate or render obvious the claim element of "activating" or "selecting a tasking horizon."

As defined on page 170 of Duncan, the term "target finish date," as relied upon on page 6 of the Final Office Action, is defined as "[t]he date work is planned (targeted) to finish on an activity." This, however, has nothing to do with a tasking horizon which is a task-independent time window within which task dates may be scheduled for purposes of performing progress analysis, as discussed above in Section A.2. of this Appeal Brief.

Rather, Duncan's "target finish date" corresponds more closely to Appellants' "estimated stop date" for an entire task, which is but one of many task dates that can be moved into and out of Appellants' tasking horizon.

Similarly, the "schedule development" passage cited in the final rejection is found at the third bullet point on page 31 in Duncan, and is merely defined as "analyzing activity sequences, activity durations, and resource requirements to create the project schedule," wherein the phrase "activity sequences" is briefly described at the first bullet point on page 31, and the phrase "activity durations" is briefly described at the second bullet point on the same page in Duncan. Duncan defines "activity sequences" as "identifying and documenting interactivity dependencies" (and cross-references section 6.2 in Duncan). Similarly, the phrase "activity durations" is described on page 31 of Duncan to be "the number of work periods which will be needed to complete individual activities" (and crossreferences section 6.3 in Duncan). A careful reading of these portions in Duncan reveal no teaching or suggestion whatsoever of a tasking horizon as used in the present invention. Moreover, going beyond page 31, further careful reading of cross-referenced sections 6.2 and 6.3 in Duncan further attests that none of the portions of Duncan identified in the final rejection suggests the concept of a task independent time window into and out of which various task dates may be moved. (Duncan, pp. 62-66.) (Sections 6.2 and 6.3 in Duncan merely provide a fuller discussion of the activity sequencing and activity durations mentioned above.).

Furthermore, the description of the term "schedule development" on page 31 in Duncan cross-references section 6.4 thereof, found at pages 66-71. Turning to section 6.4, Duncan states that "[s]chedule development means determining start and finish dates for project activities." Again, while this passage of Duncan may correspond to the predicting or estimating of start and stop dates in Appellants' invention and to the erroneous definition of "tasking horizon" set forth in the final rejection, it does not suggest the claim elements of "activating" or "selecting a tasking horizon" as discussed above.

While estimated start and stop dates for project activities are applicable concepts within the overall scheme disclosed in both the present application and Duncan, Appellants' claimed invention defines an additional plane of reference by analyzing movements of estimated dates and differences between estimated dates and actual dates against a fixed, task-independent planning window. This additional plane of reference is

absent entirely from Duncan. Thus, contrary to the assertions in the final rejection, the passages cited from Duncan do not and cannot meet the claimed step or module for "activating" or "selecting a tasking horizon" recited in independent claims 1, 9, 10, 17, 22 and 23, and as discussed above in section A.2. of this Appeal Brief.

## c. "Selecting 'A Verb"

i. The Examiner Applies an Incomplete/Incorrect Definition of "Verb"

Claim 1 recites a step of "selecting a language . . . ," and also "wherein a verb describes a reason . . . for said churn." Similarly, independent claims 9, 17, and 23 each recites a step of "selecting at least two verbs . . . ," while independent claims 10 and 22 each recites a module for "assigning at least two verbs . . ." The term "language" as found in claim 1 encompasses the term "verb," the definition of which, with respect to the present invention, is discussed above in section A.3. of this Appeal Brief. Since the Examiner's interpretation of the term is inaccurate, as described above, the conclusions that the relevant elements in claims 1, 9, 10, 17, 22 and 23 are met by the cited passages in Duncan also are incorrect.

In maintaining the final rejection of claims 1, 9, 17 and 23, the Examiner alleges that section 4.3.3.3 in Duncan meets the elements of the claims identified above (Final Office Action, p. 6, item 13, *inter alia*). Section 4.3.3.3 in Duncan (p. 46) states that "[t]he causes of variances, the reasoning behind the corrective action chosen, and other types of lessons learned should be documented so that they become part of the historical database for both this project and other projects of the performing organization." The rationale for this rejection is that "verbs and language are encompassed by lessons learned" (Final Office Action, p. 6). The "lessons learned" in Duncan, however merely reflect the generalized concept and goal of learning from the past, and is not restricted to selecting reasons or explanations for performance successes or failures from structured sets of words and/or phrases. In fact, nowhere in the cited section of Duncan, or, for that matter,

anywhere in Duncan is there any suggestion of a set or sets of predetermined, structured words or phrases selected during a planning phase of the process.

The final rejection of claims 10 and 22 asserts that Duncan's disclosure of "activity definition and activity sequencing" on pp. 30-32 and section 3.3.2 in Duncan (specifically, the bottom of p. 30 to the first line on p. 31 in Duncan) meets the claimed element of "assigning at least two verbs . . ." (Final Office Action, p. 11). These two passages cross reference sections 6.1 and 6.2 of Duncan, found at pages 59-64, with an overview chart thereof on p. 60. These pages in Duncan discuss identifying the specific activities that must be performed, and arranging the identified activities into an executable sequence, respectively. Nowhere in pages 59-64 does Duncan suggest predefining a structured set of words and phrases. In fact, the portions of Duncan cited in the rejection are completely irrelevant to the identification of reasons why a task date was or was not executed as predicted. Thus, the final rejection's application of Duncan here is even inconsistent with its own definition of the term "verb"! For each of these reasons, therefore, the final rejection fails to demonstrate any teaching or suggestion in Duncan of Appellants' claim element of "selecting a verb" as recited in each of the independent claims.

# ii. The Passage Relied Upon in the Final Rejection is Taken Out of Context

The final rejection contends that section 4.3.3.3 in Duncan meets the claim element of "selecting a language" and "selecting at least two verbs" as recited in independent claims 1, 9, 17 and 23 (Final Office Action, pp. 6, 9, 13, inter alia). Section 4.3.3.3 in Duncan (p. 46) is entitled "lessons learned" and is a result or conclusion of a section entitled "Overall Change Control," one of the three major topics within the Chapter on "Project Integration Management." An overview of the topics in this chapter is shown in Figure 4-1 on page 41 in Duncan. The process of "Overall Change Control" is concerned with changes to the integrated project plan. This process is performed by considering the various information specified as input in section 4.3.1 (Duncan, p. 44), and using the tools and techniques listed in section 4.3.2 (Duncan, p. 45), provides the conclusions listed in

section 4.3.3, including the "lessons learned" as relied upon in the final rejection to meet the claim element of "selecting a language/two verbs."

As explained above in section A.2. in this Appeal Brief, the term "verb" as used in the present invention and as described in the instant specification is a word or phrase from a set or sets of predetermined, structured words and phrases selected in the planning phases of the project prior to the assigning of tasks. The "verb" set(s) of the present invention is an input to the modeling system, so that employees can select from this set or sets when identifying their reasons for meeting or not meeting an estimated date relative to the appropriate tasking horizon.

In contrast, Duncan's "lessons learned" in an output of the "Overal Change Control" process (Duncan, FIG. 4-1, p. 41). Appellants' "verbs" do not represent results or conclusions in the manner of Duncan's "lessons learned." It is improper for the final rejection to overlook the role of the cited "lessons learned" section in Duncan within the overall context of Duncan's outline, and to force fit the reference into the contours defined by Appellants' claims.

# d. "Receiving An Actual Date"

Independent claims 1, 9, 17 and 23 each recites a "method for modeling multiple tasks . . ." which includes a step of "receiving an actual [] date . . ." In the present invention, an "actual date" corresponds with an actual date of performance with respect to a task, *i.e.*, the date that work on a task is actually started, the date that a task is actually completed, etc. (specification, p. 14, lns. 6-11, 20-22, for example). According to the final rejection, the claimed step of "receiving an actual [] date" is met by Figure 3-5 [6.4] on page 31 in Duncan (Final Office Action, pp. 6, 10, 14). Figure 3-5 is an overview illustration of the planning process for a project. The segment "[6.4]" cited in the final rejection is a "Schedule Development" segment, which occurs before the cost budgeting process (segment 7.3) and project plan development (segment 4.1). (Duncan, FIG. 3-5, p. 31).

As noted by the arrow at the right hand side of Figure 3-5, after performance of all the segments in the Figure, the outline moves to the executing processes. Appellants find it curious that the final rejection considers one of the preliminary phases in the planning process to read on the claimed step of "receiving an actual date." The final rejection fails to explain how an actual date of a project task can occur before the overall plan for the project has been fully developed, and before the project has entered the execution phase.

The final rejection also points to page 159 in Duncan as disclosing on the "receiving an actual [] date . . ." step recited in the claims (Final Office Action, pp. 6, 10, 14). Page 159, however, is nothing more than a glossary page defining the terms "Actual Finish Date" and "Actual Start Date." Duncan, however, provides no teaching or suggestion whatsoever of doing anything with an actual date, much less "receiving" any actual dates into a modeling method, and then also performing the various other steps recited in Appellants' claims 1, 9, 17 and 23. In fact, the terms "Actual Finish Date" and "Actual Start Date" are not found anywhere in the entire book, other than on page 159. The Examiner's position that the claim element "receiving an actual [] date" is met by Duncan, therefore, is untenable.

# e. "Computing" or "Assigning a Risk Factor"

Independent claims 9 and 23 recite the step of "computing a risk factor" based on one of the selected verbs, while independent claims 10, 17 and 22 recite a function or step of assigning a risk factor based on one of the selected verbs. Appellants' specification describes the term "risk factor" as either a percentage probability that an actual task date will deviate from the estimated task date, or as a standard deviation of time within which the actual task date is likely to vary from the estimated date (specification, p. 18, ln. 20, – p. 19, ln. 22; p. 22, ln. 10 – p. 23, ln. 2, *inter alia*).

The Final Office Action contends that section 11.2 in Duncan, entitled "Risk Quantification," reads on Appellants' claim elements of computing and assigning a risk factor based on a selected verb (Final Office Action, pp. 9 (top), 10, 12 (top)). As

disclosed in lines 3-4 on page 115 in Duncan, section 11.2 "is primarily concerned with determining which risk events warrant response." Such determination is accomplished by identifying discrete risk events (Duncan, sections 11.2.1.2, 11.2.1.3, at p. 115) and evaluating the monetary cost of each discrete risk event (Duncan, section 11.2.2, at pp. 115-116), to thereby enable a decision to be made as to which risk events should be addressed (Duncan, section 11.2.3 at p. 117). As shown in Figure 3-5 on page 31, the section 11.2, "Risk Quantification," falls within the planning stages of the project, before execution of any tasks have begun.

In the claimed invention, however, the risk factor is computed or assigned based on a verb received by the modeling system in connection with an actual date associated with a task (e.g., claim 22, which recites that the "management module . . . assigns a risk factor to said task based on at least one of said verbs . . . used to describe said churn"; and claim 23, which recites the step of "receiving one of said at least two verbs that corresponds to said actual start date, wherein said verb describes at least one reason for said actual start date."). In order to obtain an actual date, at least a portion of a task within a project must have been executed. Thus, section 11.2 in Duncan as cited in the final rejection does not teach or suggest the claimed function/step of computing or assigning a risk factor based on a selected verb.

# 2. Duncan Does Not Suggest The Claimed Invention As A Whole

The claimed invention is a system and method for modeling the planning and execution of a project. One of the most important aspects of this invention are that it defines a predetermined, task-independent planning window into and out of which various estimated and actual task dates are scheduled and/or moved, and then analyzes the progress of the various project tasks by focusing on reasons for "churn," *i.e.*, reasons why an actual task date differs from an estimated task date, when the churn dates are not encompassed entirely within a selected tasking horizon. By keeping track of such variances for each task date, project management personnel are enabled to more accurately predict

the timing of the project and to take possible actions to minimize churn as execution of the project progresses and for future projects.

In addition to relying on the concepts of a tasking horizon and verbs as discussed in Section A.2. above in this Appeal Brief, the claimed invention is algorithmic and iterative in nature (e.g., steps of "selecting at least two verbs," "receiving a predicted start date," "receiving an actual start date," "comparing said predicted start date with said actual start date," "computing churn," and "assigning a risk factor" based on one of the selected verbs, etc.). Independent claims 10 and 22 recite apparatus components such as a management module and a task assignment station for performing selected ones of the method steps recited in independent claims 1, 9, 17 and 23.

All project management tools seek to provide a level of organization and control to achieve optimal efficiency and effectiveness in completing the ultimate project objective. The claimed invention does this by acquiring and analyzing data at regular periods during the execution of the project. Duncan, on the other hand, as does all the other prior art project management tools which Appellants are aware, only manages the projects on a macro level, and is unconcerned with the myriad of day-to-day conditions, minor occurrences, or other minutiae which may affect the performance of only one or a few individual employees at a time.

In particular, Duncan is a broad, conceptually-based outline for project managers, which offers only a bird's eye view of an overall project management plan. Duncan does not teach or suggest all of the specific implementation steps or specific apparatus components such as the claimed management module or the claimed task assignment station recited in Appellants' claims. When the claimed invention is viewed as a whole, and compared with Duncan, viewed as a whole, it is clear that the two are significantly different from each other.

Absent specifically demonstrated support in the prior art (Duncan or otherwise) for each of the elements recited in Appellants' claims, the final rejection frequently resorts to broad conclusions that "Duncan provides the functionality" of the claimed features to

support the conclusion of obviousness. (See, e.g., Final Office Action, p. 10; p. 12 (second paragraph); p. 14 (last paragraph); p. 15 (first paragraph), inter alia). The "functionality" that is common between Duncan and the claimed invention is also shared by all other project management plans, outlines, methods, etc. That is, all have the goal of scheduling and predicting the performance of a project from start to finish in the most efficient and effective manner. However, mere functionality does not meet the claims when the elements recited in the claims are not taught or suggested in the cited prior art. A hovercraft and a bicycle both provide the functionality of enabling a person to travel from point A to point B, but that does not mean that both travel to their destination in the same manner or that one apparatus is an obvious modification of the other.

#### IX. CONCLUSION

It is a well-established principle in patent law that a conclusion of obviousness is improper unless "the teachings of the prior art . . . in and of themselves, and without the benefit of Appellants' disclosure, make the invention's a whole obvious." In re Sponnable, 405 F.2d 578, 585 (C.C. PA 1969).

However, in this case, the final rejection has not presented any clear lines of reasoning as to how or why one of ordinary skill in the art would be influenced by Duncan or any other prior art to modify Duncan's teachings to provide each and every specific feature of Appellants' invention as particularly recited in the claims, as read in light of the specification. For example, the final rejection has failed to demonstrate any teaching, suggestion, or motivation in Duncan to identify a task-independent time window corresponding to Appellants' claimed "tasking horizon," a predetermined, structured set or set(s) of words and phrases corresponding to Appellants' claimed "verbs," *inter alia*. The final rejection under 35 U.S.C. 103 is predicated on inaccurate definitions of the terms "tasking horizon," and "verbs." Those inaccuracies propagate through the reasoning in the entire rejection.

For all of the reasons discussed in this Appeal Brief, Appellants' respectfully submit that the claimed invention cannot be rendered obvious by Duncan. Accordingly, reversal of the rejection under 35 U.S.C. 103 is courteously solicited.

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### APPENDIX A

1. A method for modeling multiple tasks for multiple users comprising the steps of:

breaking a project into said multiple tasks;

activating a current tasking horizon, said tasking horizon comprising one of a plurality of time frames over which said multiple tasks can be completed;

selecting a language for at least one of said multiple tasks;

receiving an actual date for said at least one of said multiple tasks;

receiving an estimated date for said at least one task;

calculating a first negative churn if said received estimated date is created in or moved into said current tasking horizon;

calculating a first positive churn if said received estimated date is deleted or moved out of said current tasking horizon;

calculating a second positive churn if said received estimated date exists in said current tasking horizon and said received actual date is moved out of or is created outside of said current tasking horizon;

calculating a third positive churn is said received actual date is moved out of said current tasking horizon and an accompanying received estimated date is not in said current tasking horizon;

calculating a second negative churn when said received actual date is created in or is moved into said current tasking horizon and said received estimated date is not in said current tasking horizon; and

receiving language that corresponds to said actual date, wherein a verb describes a reason for said actual date and for said churn.

- 2. The method as claimed in claim 1 further comprising the step of: classifying said received verb as employee dependent.
- 3. The method as claimed in claim 1 further comprising the step of: classifying said received verb as task dependent.
- 4. The method as claimed in claim 1 further comprising the step of: classifying said received verb as environment dependent.
- 7. The method as claimed in claim 1 further comprising the steps of: comparing said tasks of said project to previously performed tasks;

extracting previously performed task completion data, said data including previous churn data and risk factor data; and computing an expected task completion time based at least in part on said previously performed task completion data.

8. The method as claimed in claim 1 further comprising the steps of:

comparing said tasks of said project to previously performed tasks;

extracting a risk factor associated with said previously performed tasks;

and computing a new risk factor based at least in part on said extracted risk factor.

9. (Amended) A method for modeling tasks comprising the steps of:
breaking a project into multiple tasks, wherein there is at least a first task and a second task;

selecting a current tasking horizon from a plurality of potential event horizons representing a plurality of timeframes;

selecting at least two verbs for said first task;
selecting at least two verbs for said second task;
assigning said first task to a first task assignment station;
assigning said second task to a second task assignment station;
receiving a predicted start date and a predicted completion date for said first task
from said first task assignment station;

receiving a predicted start date and a predicted completion date for said second task from said second task assignment station;

receiving an actual start date and a first verb for said first task; receiving an actual start date and a second verb for said second task; computing churn of said first task; computing churn of said second task; computing a risk factor for said first task based on said first verb; and computing a risk factor for said second task based on said second verb.

10. An apparatus for task modeling comprising:

a management module for breaking a project into tasks, selecting a tasking horizon and for assigning at least two verbs for at least one of said tasks;

a task assignment station for receiving said at least one task and for entering a predicted start date for said at least one task and for entering an actual start date;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives said predicted start date and said actual start date and computes a churn and assigns a risk factor to said task based on at least one of said verbs, wherein said at least one verb describes a reason for said churn.

- 11. (Amended) The method as claimed in claim 1, wherein said actual date comprises an actual start date and an actual stop date.
- 12. The method as claimed in claim 11 wherein said method results in a reduction of said churn.
- 13. (Amended) The method as claimed in claim 1 wherein said actual date comprises an actual start date and an actual stop date.
- 14. The method as claimed in claim 1 wherein said received estimated dates comprise an estimated start date and an estimated stop date.
- 15. The method as claimed in claim 1 further comprising assigning a risk factor to a second task which is dependent upon a first task.

16. The method as claimed in claim 9, wherein said second task is dependent on said first task.

17. (Amended) A method for modeling tasks comprising the steps of: breaking a project into tasks;

selecting a tasking horizon;

selecting at least two verbs for at least one of said tasks, wherein each of said verbs is task dependent;

receiving a predicted start date and a predicted stop date for said at least one task;

receiving an actual start date and an actual stop date for said at least one task; receiving one of said at least two verbs that corresponds to said actual start and stop dates, wherein said verb describes at least one reason for said actual start and stop dates;

comparing said predicted start and stop dates with said actual start and stop dates;

computing churn of said at least one task; and

reviewing said churn in view of said at least one verb, and assigning a risk factor to said task based on said review.

- 18. (Amended) The method as claimed in claim 17, wherein said risk factor is equal to a percentage of the time between said predicted start and stop dates.
- 19. The method as claimed in claim 7, wherein said previous risk factor is task dependent.

20. The apparatus as claimed in claim 10, wherein said apparatus classifies said churn as positive churn or negative churn.

21. (Amended) The apparatus as claimed in claim 20, wherein said apparatus is utilized in a churn monitoring program to reduce said churn.

### 22. An apparatus for task modeling comprising:

a management module for breaking a project into tasks, selecting a tasking horizon and for assigning at least two verbs for at least one of said tasks;

a task assignment station for receiving said at least one task and for entering a predicted start and stop date for said at least one task and for entering an actual start and stop date;

wherein said management module and said task assignment station are operationally connected and wherein said management module receives said predicted start and stop dates and said actual start and stop dates and computes a churn and assigns a risk factor to said task based on at least one of said verbs having a reason associated therewith used to describe said churn.

23. A method for modeling tasks comprising the steps of:

breaking a project into a plurality of tasks;

selecting a tasking horizon;

selecting at least two verbs for at least one of said tasks;

receiving a predicted start date for said at least one task;

receiving an actual start date for said at least one task;

receiving one of said at least two verbs that corresponds to said actual start date, wherein said verb describes a reason for said actual start date;

comparing said predicted start date with said actual start date;

computing churn of said at least one task;

computing a risk factor based at least in part on at least one of said computed churn and said received verb.

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BASED ON USER DEFINED CRITERIA AND PREDICTIVE ABILITY

#### **Documents Filed:**

Appellant Brief (18 pages); Appendix A(7 pages) in Appendix B (183 pages) - (all in triplicate)

Appeal Brief Transmittal (1 page)

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